K19P 0263

Reg. No. : .....

Name : .....

II Semester M.Sc. Degree (Reg./Suppl./Imp.) Examination, April 2019
(2014 Admission Onwards)
BOTANY
BOT2C08 : Cell and Molecular Biology

Time : 3 Hours Max. Marks : 60

I. Answer **any two** of the following : **(2×8=16)**

1) Explain cell cycle and its regulation.

OR

2) Describe the mechanism of programmed cell death.

3) Discuss chromosomal aberrations with reference to human beings.

OR

4) Write an account on the structure and biosynthesis of purines.

II. Answer **any two** of the following : **(2×6=12)**

5) a) NPC proteins. 2

b) Nuclear localization signals. 2

c) Nuclear receptors. 2

6) a) Tumor. 1

b) Cancer and food. 2

c) Carcinogenesis. 3

7) a) Transposanes. 1

b) Mechanism of action. 3

c) Transposanes and evolution. 2

III. Answer **any six** of the following : **(6×3=18)**

8) Organisation and role of centromere.

9) Motor proteins.

P.T.O.

10) Karyotype and idogram.
11) Transport signals and signal patches.
12) Types of RNA.
13) Transcription coupled DNA repair.
14) Transposanes and mutation.
15) Post translational regulation.

IV. Answer **any seven** of the following : **(7×2=14)**

16) Introns.
17) Endomitosis.
18) Edward syndrome.
19) Selectins.
20) Enhancers.
21) Gene silencing.
22) P elements.
23) LINEs.
24) Cancer therapy.
25) Big gene.
